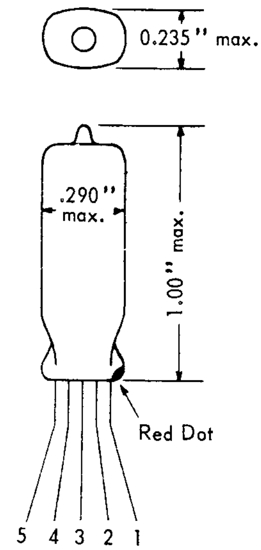
SUBMINIATURE PENTODE

TYPE CK6419

The CK6419 is a filament type pentode of subminiature construction designed for use as a voltage amplifier in portable and wearable equipment. It is similar in characteristics to type CK549DX. The flexible terminal leads may be soldered or welded directly to the terminals of circuit components without the use of sockets. Standard inline subminiature sockets may be used by cutting the leads to a suitable length.



MECHANICAL DATA

ENVELOPE: T-1½X2 Glass

BASE: None (0.016" tinned flexible leads. Length: 1.5" min. Spacing: 0.040" center-to-center)

TERMINAL CONNECTIONS: *(Red Dot is adjacent to Lead 1)*

- Lead 1 Plate
- Lead 2 Grid #2
- Lead 3 Filament, Negative, Grid #3 ♦
- Lead 4 Grid #1
- Lead 5 Filament, Positive, Grid #3 ♦

MOUNTING POSITION: Any

ELECTRICAL DATA

RATINGS - ABSOLUTE MAXIMUM VALUES:

Filament Voltage (dc)	0.625 ± 20%	volts
Plate Voltage	25	volts
Grid #2 Voltage	25	volts
Cathode Current	0.1	ma.

CHARACTERISTICS AND TYPICAL OPERATION:

Filament Voltage (dc)	0.625	volts
Filament Current	10	ma.
Plate Voltage	15	volts
Grid #2 Voltage	15	volts
Grid #1 Voltage	-0.625	volts
Plate Current	55	μa.
Grid #2 Current	20	μa.
Transconductance	100	μmhos
Plate Resistance (approx.)	2	meg.

CHARACTERISTICS AND TYPICAL OPERATION - RESISTANCE COUPLED CLASS A1 AMPLIFIER:

Filament Voltage (dc)	0.625	volts
Filament Current	10	ma.
Plate and Grid #2 Supply Voltage	15	volts
Grid #1 Voltage	-0.625	volts
Load Resistance	2.2	meg.
Grid #2 Resistor	3.3	meg.
Grid #1 Resistor	10	meg.
Plate Current	4.6	μa.
Grid #2 Current	2.0	μa.
Transconductance	17	μmhos
Plate Resistance (approx.)	12	meg.
Average Voltage Gain ▲	27	

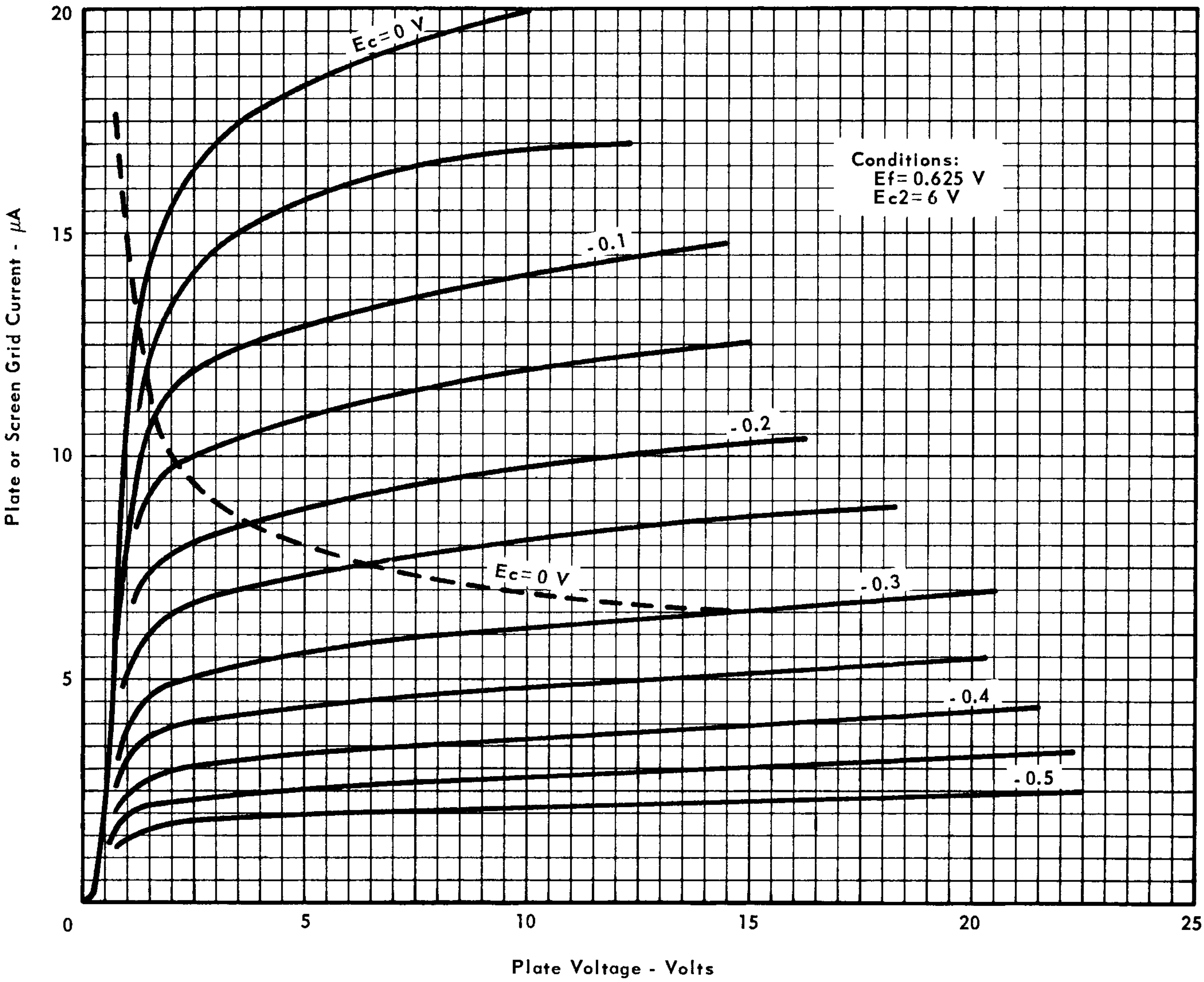
▲ *Measured with a signal of 0.05 volts (RMS) and a coupled load impedance of 10 megohms.*

♦ *Grid #3 is composed of two deflector plates, one being connected to lead 3 and the other to lead 5.*

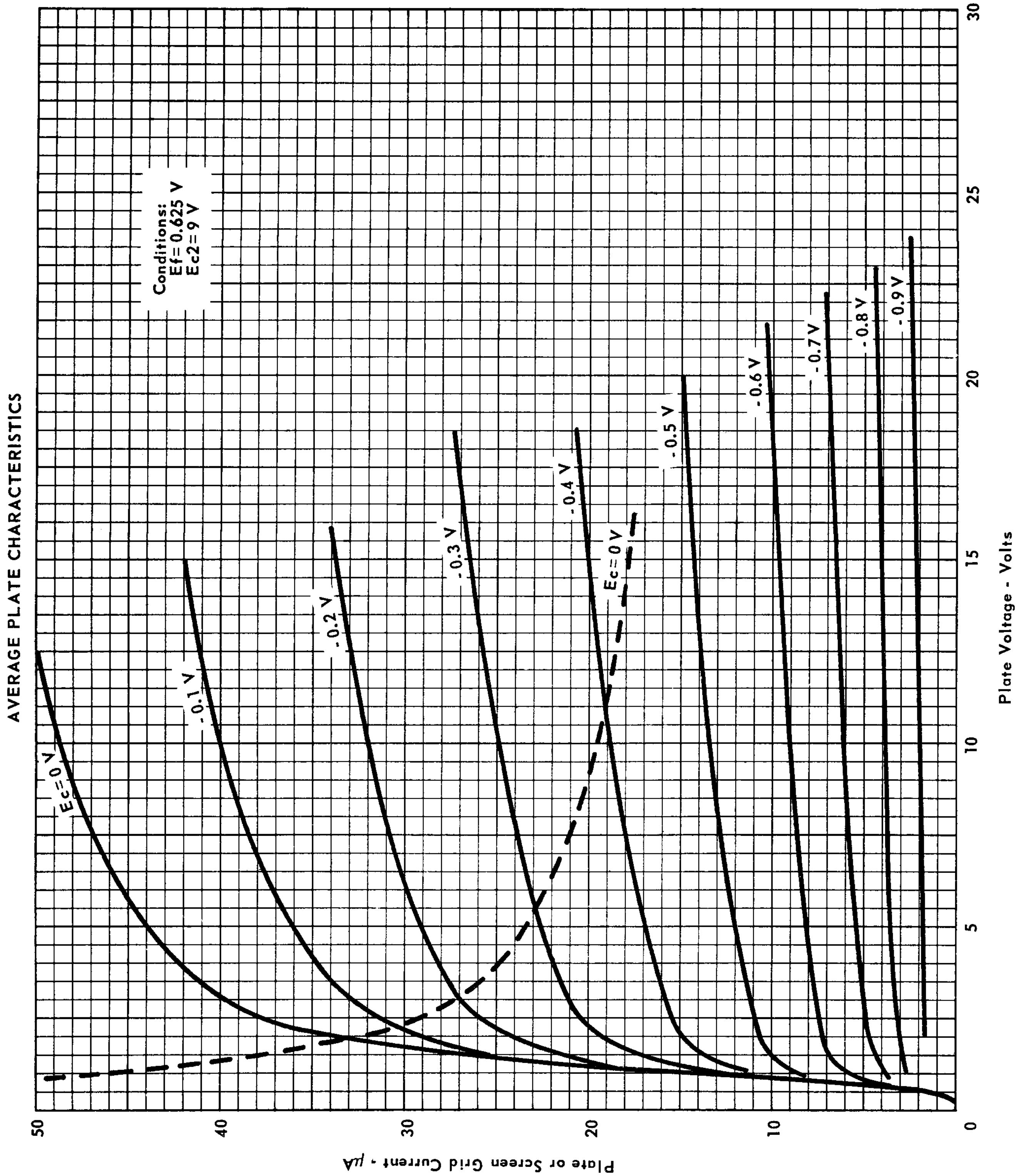
Tentative Data

SUBMINIATURE PENTODE

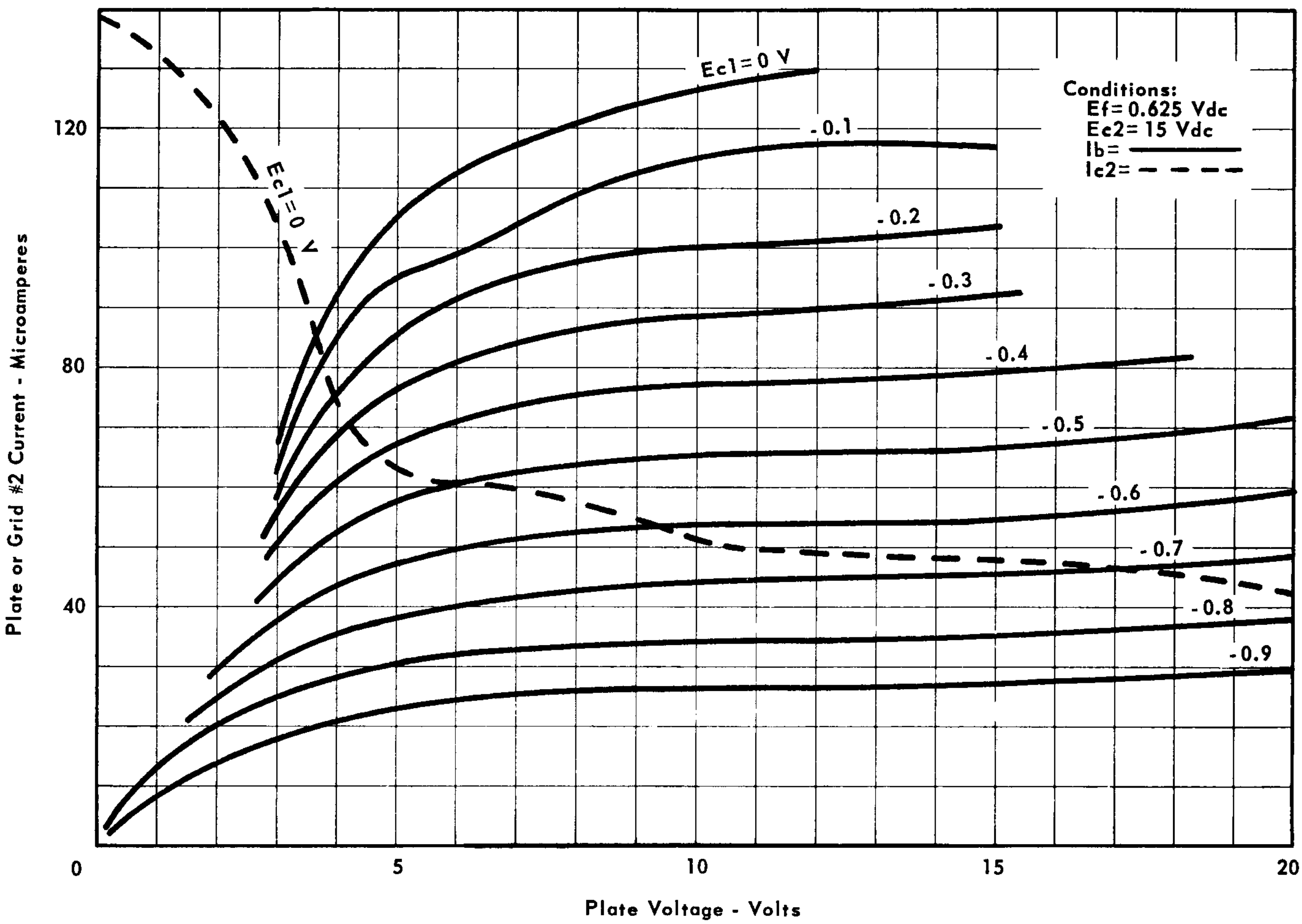
AVERAGE PLATE CHARACTERISTICS



SUBMINIATURE PENTODE



AVERAGE PLATE CHARACTERISTICS



AVERAGE PLATE CHARACTERISTICS
(Triode Connected)

